

IN THE CLAIMS

1.-24. (Cancelled)

25. (currently amended): An isolated nucleic acid molecule encoding a poly (ADP-ribose) polymerase-embryonic (PARP[-e]) comprising a nucleotide sequence at least 70% 90% identical to SEQ ID NO: 1 or SEQ ID NO: 10.

26. (previously presented): The isolated nucleic acid molecule of claim 25, wherein the nucleotide sequence is at least 90% identical to SEQ ID NO: 1.

27. (currently amended): The isolated nucleic acid molecule of claim ~~26~~ 25, wherein the nucleotide sequence encodes a PARP[-e] comprising SEQ ID NO: 2.

28. (currently amended): The isolated nucleic acid of claim 25, wherein the nucleic acid molecule encodes an animal PARP[-e].

29. (currently amended): The isolated nucleic acid of claim 25, wherein the nucleic acid molecule encodes a plant PARP[-e].

30. (previously presented): The isolated nucleic acid of claims 28, wherein the nucleic acid comprises SEQ ID NO: 1.

31. (canceled)

32. (previously presented): The isolated nucleic acid molecule of claim 30, wherein the nucleic acid consists of SEQ ID NO: 1.

33. (currently amended): An isolated nucleic acid molecule encoding a PARP[-e], wherein the nucleic acid molecule hybridizes under stringent conditions to a nucleic acid molecule encoding SEQ ID NO: 2.

34. (previously presented): The isolated nucleic acid molecule of claim 33, wherein the nucleic acid molecule hybridizes under stringent conditions to SEQ ID NO: 1.
35. (currently amended): The isolated nucleic acid of claim 33, wherein the nucleic acid molecule encodes an animal PARP[-e]
36. (currently amended): The isolated nucleic acid of claim 33, wherein the nucleic acid molecule encodes a plant PARP[-e].
37. (previously presented): An isolated nucleic acid molecule which is complementary to the nucleic acid of claim 25.
38. (previously presented): The isolated nucleic acid of claim 25, wherein the nucleic acid is operably linked to one or more expression control elements.
39. (previously presented): An isolated nucleic acid molecule comprising the genomic DNA corresponding to the nucleic acid molecule of claim 25.
40. (previously presented): The isolated nucleic acid of claim 39, wherein the nucleic acid comprises SEQ ID NO: 10.
41. (previously presented): A vector comprising the isolated nucleic acid of claim 25.
42. (previously presented): A host cell containing the nucleic acid of claim 25.
43. (previously presented): The host cell of claim 42, wherein the cell is an eukaryotic cell.
44. (previously presented): The host cell of claim 43, wherein the eukaryotic cell is a plant cell or animal cell.
45. (previously presented): The host cell of claim 44, wherein the animal cell is a yeast cell, mammalian cell or insect cell.

46. (previously presented): The host cell of claim 42, wherein the cell is a prokaryotic cell.

47. (previously presented): The host cell of claim 46, wherein the prokaryotic cell is a bacterium.

48. (previously presented): A method of producing a protein comprising cultivating the host cell of claim 42 under conditions that allows expression of the protein and recovering the expressed protein.

49.-75. (canceled)